

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) In an access management system comprising an identity-system, system for managing identity profiles and an access system for providing security of resources across one or more web servers, a method for defining a workflow for managing entity identities, the method comprising the steps of:

the ~~identity~~ access management system accessing a template that indicates parameters for defining workflows;

creating a definition of a first workflow for managing at least one identity of at least one entity, based on said template; and

storing said definition of said first workflow.

2. (Original) A method according to claim 1, wherein:
said template includes a set of parameters for each action available to a workflow type.

3. (Original) A method according to claim 1, wherein:
said template is an XML document.

4. (Original) A method according to claim 1, further comprising the steps of:
adding data to said template after said step of storing;
creating a definition of a second workflow after said step of adding data; and
storing said definition of said second workflow.

5. (Original) A method according to claim 1, further comprising the step of:
creating said template.
6. (Original) A method according to claim 5, wherein said step of creating
said template includes the steps of:
adding a set of workflow types to said template;
adding one or more actions for at least a subset of said workflow types; and
adding parameters for at least a subset of said actions.
7. (Original) A method according to claim 1, wherein:
said template applies to only one application.
- 8 (Original) A method according to claim 1, wherein:
said template includes parameters for creating objects, deleting objects and
changing attributes.
9. (Original) A method according to claim 1, wherein:
said template includes parameters for self registration.
10. (Original) A method according to claim 1, wherein:
said template includes a parameter indicating whether supplied variables can be
used in said step of creating.
11. (Original) A method according to claim 1, wherein:
said template includes a parameter indicating whether additional workflows can
be used to supply data.
12. (Original) A method according to claim 11, wherein:
said additional workflows includes multiple levels of nesting of workflows.

13. (Canceled)

14. (Original) A method according to claim 1, wherein said step of creating includes the step of:

accessing one or more parameters in said template;
offering a set of options based on said accessed parameters; and
receiving a selection of one or more of said offered options.

15. (Original) A method according to claim 1, wherein said step of creating includes the steps of:

determining a first set of possible actions for a particular step based on said template;
reporting said first set of possible actions; and
receiving a selection of a first action of said first set of possible actions.

16. (Original) A method according to claim 1, wherein said step of creating includes the steps of:

determining a first set of possible data types for a particular action based on said template;
reporting said first set of possible data types;
receiving an indication of a variable for said first workflow; and
receiving a selection of a first data type for said variable.

17. (Original) A method according to claim 16, wherein:
said first data type is a variable supplied by another workflow.

18. (Original) A method according to claim 1, wherein said step of creating includes the steps of:

- determining whether pre actions are available for a particular action based on said template;
- reporting whether pre actions are available for said particular action; and
- receiving a selection of whether to add pre actions to said definition of said first workflow for said particular action.

19. (Original) A method according to claim 1, wherein said step of creating includes the steps of:

- determining a first set of possible entry conditions for a particular action based on said template;
- reporting said a first set of possible entry conditions;
- receiving a selection of a first entry condition of said first set of possible entry conditions;
- determining and reporting whether said first entry condition is associated with a sub-workflow; and
- receiving an indication whether said first workflow should wait for said sub-workflow.

20. (Original) A method according to claim 1, wherein said step of creating includes the steps of:

- determining a first set of possible actions for a particular step based on said template;
- reporting said first set of possible actions;
- receiving a selection of a first action of said first set of possible actions;
- determining a first set of possible data types for said first action based on said template;

reporting said first set of possible data types;
receiving an indication of a variable for said first workflow;
receiving a selection of a first data type for said variable;
determining whether pre or post actions are available for said first action based on said template;
reporting whether pre or post actions are available for said first action;
receiving a selection of whether to add pre or post actions to said definition of said first workflow for said first action;
determining a first set of possible entry conditions for said first action based on said template;
reporting said a first set of possible entry conditions;
receiving a selection of a first entry condition of said a first set of possible entry conditions;
determining and reporting whether said first entry condition is associated with a sub-workflow; and
receiving an indication whether said first workflow should wait for said sub-workflow.

21. (Original) A method according to claim 1, wherein said step of creating includes the steps of:

accessing one or more parameters in said template;
offering a set of options in a graphical user interface based on said accessed parameters; and
receiving a selection of one or more of said offered options using said graphical user interface.

22. (Currently Amended) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code comprising software executable by an access management system

comprising an identity system for managing identity profiles and an access system for providing security of resources across one or more web servers, the set of instructions comprising: ~~for programming one or more processors to perform a method for defining a workflow for managing entity identities, the method comprising the steps of:~~

instructions for the access management system to access ~~accessing~~ a template that indicates parameters for defining workflows;

instructions to create ~~creating~~ a definition of a first workflow for managing at least one identity of at least one entity, based on said template; and

instructions to store ~~storing~~ said definition of said first workflow.

23. (Currently Amended) One or more processor readable storage devices according to claim 22, wherein said set of instructions ~~method~~ further comprises: ~~comprises the steps of:~~

instructions to add ~~adding~~ data to said template after said step of storing;

instructions to create ~~creating~~ a definition of a second workflow after said step of adding data; and

instructions to store ~~storing~~ said definition of said second workflow.

24. (Currently Amended) One or more processor readable storage devices according to claim 22, wherein said set of instructions further comprises instructions to create ~~method further comprises the step of creating~~ said template, said instructions to create said template comprising: ~~step of creating said template includes the steps of:~~

instructions to add ~~adding~~ a set of workflow types to said template;

instructions to add ~~adding~~ one or more actions for at least a subset of said workflow types; and

instructions to add ~~adding~~ one or more parameters for at least a subset of said actions.

25. (Original) One or more processor readable storage devices according to claim 22, wherein:

said template includes parameters for self registration.

26. (Original) One or more processor readable storage devices according to claim 22, wherein:

said template includes a parameter indicating whether additional workflows can be used to supply data.

27. (Original) One or more processor readable storage devices according to claim 26, wherein:

said additional workflows includes multiple levels of nesting of workflows.

28. (Canceled)

29. (Currently Amended) One or more processor readable storage devices according to claim 22, wherein said instructions to create said definition comprise: step of ~~creating includes the steps of:~~

instructions to access ~~accessing~~ one or more parameters in said template;

instructions to offer ~~offering~~ a set of options in a graphical user interface based on said accessed parameters; and

instructions to receive ~~receiving~~ a selection of one or more of said offered options using said graphical user interface.

30. (Currently Amended) One or more processor readable storage devices according to claim 22, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~

instructions to determine ~~determining~~ a first set of possible actions for a particular step based on said template;

instructions to report ~~reporting~~ said first set of possible actions; and
instructions to receive ~~receiving~~ a selection of a first action of said first set of possible actions.

31. (Currently Amended) One or more processor readable storage devices according to claim 22, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~

instructions to determine ~~determining~~ a first set of possible data types for a particular action based on said template;

instructions to report ~~reporting~~ said first set of possible data types;

instructions to receive ~~receiving~~ an indication of a variable for said first workflow; and

instructions to receive ~~receiving~~ a selection of a first data type of said variable, said first data type is a variable supplied by another workflow.

32. (Currently Amended) One or more processor readable storage devices according to claim 22, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~

instructions to determine ~~determining~~ a first set of possible entry conditions for a particular action based on said template;

instructions to report ~~reporting~~ said first set of possible entry conditions;

instructions to receive ~~receiving~~ a selection of a first entry condition of said first set of possible entry conditions;

instructions to determine ~~determining~~ and reporting whether said first entry condition is associated with a sub-workflow; and

instructions to receive ~~receiving~~ an indication whether said first workflow should wait for said sub-workflow.

33. (Currently Amended) An access management system having an identity system for managing identity profiles and an access system for providing security of resources across one or more web servers, the access management system ~~apparatus that can be used to define a workflow~~, comprising:

a communication interface; and
one or more processors in communication with said communication interface; and
a computer readable medium having embodied thereon a set of instructions executable to perform a method for defining a workflow for the managing entity identities, ~~the method comprising the steps of:~~ by the one or more processors, the set of instructions comprising:

- (i) instructions for the access management system to access ~~accessing~~ a template that indicates parameters for defining workflows;
- (ii) instructions to create ~~creating~~ a definition of a first workflow for managing at least one identity of at least one entity, based on said template; and
- (iii) instructions to store ~~storing~~ said definition of said first workflow.

34. (Original) An apparatus according to claim 33, wherein:
said template includes a parameter indicating whether additional workflows can be used to supply data, said additional workflows includes multiple levels of nesting of workflows.

35. (Canceled)

36. (Currently Amended) An apparatus according to claim 33, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~
instructions to access ~~accessing~~ one or more parameters in said template;
instructions to offer ~~offering~~ a set of options in a graphical user interface based on said accessed parameters; and

instructions to receive ~~receiving~~ a selection of one or more of said offered options using said graphical user interface.

37. (Currently Amended) An apparatus according to claim 33, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~
instructions to determine ~~determining~~ a first set of possible actions for a particular step based on said template;
instructions to report ~~reporting~~ said a first set of possible actions; and
instructions to receive ~~receiving~~ a selection of a first action of said a first set of possible actions.

38. (Currently Amended) An apparatus according to claim 33, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~
instructions to determine ~~determining~~ a first set of possible data types for a particular action based on said template;
instructions to report ~~reporting~~ said first set of possible data types;
instructions to receive ~~receiving~~ an indication of a variable for said first workflow; and
instructions to receive ~~receiving~~ a selection of a first data type of said variable, said first data type is a variable supplied by another workflow.

39. (Currently Amended) An apparatus according to claim 33, wherein said instructions to create said definition comprise: ~~step of creating includes the steps of:~~
instructions to determine ~~determining~~ a first set of possible entry conditions for a particular action based on said template;
instructions to report ~~reporting~~ said a first set of possible entry conditions;
instructions to receive ~~receiving~~ a selection of a first entry condition of said first set of possible entry conditions;

instructions to determine ~~determining~~ and reporting whether said first entry condition is associated with a sub-workflow; and

instructions to receive ~~receiving~~ an indication whether said first workflow should wait for said sub-workflow.

40. (Previously Presented) A method according to claim 1, wherein the workflow performs a task selected from the group consisting of: creating a user, deleting a user, subscribing a user to a group, enrolling a certificate, renewing a certificate, revoking a certificate, and changing a user attribute.

41. (Previously Presented) A method according to claim 1, wherein the at least one entity is selected from among the group consisting of at least one user, at least one group and at least one organization.

42. (Previously Presented) A method according to claim 1, further comprising:
a workflow engine invoking the workflow.

43. (Previously Presented) A method according to claim 42, wherein the workflow comprises a set of actions comprising one or more actions, the method further comprising:

a client program performing one of the one or more actions.

44. (Previously Presented) A method according to claim 43, the method further comprising:

the workflow engine passing to the client program a callback handle uniform request locator (“callback URL”);

the workflow engine pausing the workflow;

upon completion of the one or more actions, the client program invoking the callback URL; and

upon an invocation of the callback URL, the workflow engine restarting the workflow.

45. (Previously Presented) A method according to claim 43, wherein performing the one of the one or more actions comprises:

- the client program composing an extended markup language (“XML”) document comprising a request for the one of the one or more actions;
- the client program transmitting the XML document for reception by an application;
- the application performing the one of the one or more actions;
- the application transmitting a second XML document for reception by the client program, the second XML document comprising an output message.

46. (Previously Presented) A method according to claim 45, wherein the client program communicates with the application using the simple object access protocol (“SOAP”).